

Abstract

A method is provided for decoding a bit stream representing an image that has been encoded. The method includes the steps of: performing an entropy decoding of the bit stream to form a plurality of transform coefficients and a plurality of motion vectors; performing an inverse transformation on the plurality of transform coefficients to form a plurality of error blocks; determining a plurality of predicted blocks based on bidirectional motion estimation that employs the motion vectors, wherein the bidirectional motion estimation includes a direct prediction mode and a second prediction mode; and, adding the plurality of error blocks to the plurality of predicted blocks to form the image. The second prediction mode may include forward, backward, and interpolated prediction modes.